UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/021,637 | 12/12/2001 | Laura Elizabeth Keck | 15982 | 9235 |

23556 7590 11/21/2003

KIMBERLY-CLARK WORLDWIDE, INC.
401 NORTH LAKE STREET
NEENAH, WI 54956

| EXAMINER | |
|---|---|
| COLE, ELIZABETH M | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1771 | |

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/021,637 | KECK ET AL. | |
| | Examiner | Art Unit | |
| | Elizabeth M Cole | 1771 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 September 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 10-12, 28-29, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Midkiff et al, U.S. Patent No. 5,707,735. Midkiff discloses a nonwoven fabric comprising crimped, multicomponent, multi-lobal fibers. See figs. 3-5 and col. 5, lines 19-35 and col. 5, line 59 - col. 6, line 14. The fabric may be electret treated. See col. 8, lines 31-55. The fabric may be a towel, see col. 1, lines 19-22, which implies the wiping of the towel on a surface to clean it. The fabric may be formed from a variety of fibers, including those claimed, such as polypropylene, polyethylene. See col. 6, lines 43-col. 7, line 10. The basis weight of the fabric is within the ranges claimed. See col. 12, lines 17-44.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 9, 13-20, 30-31, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff et al, U.S. Patent No. 5,707,735. Midkiff et al discloses a nonwoven fabric as set forth above. Midkiff et al differs from the claimed invention because it does not disclose the claim density. Midkiff et al also does not specifically teach intermingling pulp fibers or mono-lobal filaments, or bicomponent filaments with the multilobal fibers. However,

Midkiff clearly teaches at col. 12, that additional fibers having different sizes, materials etc., can be incorporated into the fabric in order to vary the properties of the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated additional known fiber materials such as pulp fibers, staple fibers, bicomponent fibers, etc. in order to obtain a fabric having the properties which the addition of such fibers would produce, such as different pore sizes, improved absorbency, and enhanced bonding. With regard to the density of the fabric, it similarly would have been obvious to have selected the density desired through the process of routine experimentation depending upon the density desired in view of the contemplated end use of the fabric, i.e., for filtration, hygiene products, toweling, etc.

5. Claims 21-27, 31, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff et al in view of Braun et al, U.S. Patent No. 4,778,460.

Midkiff et al differs from the claimed invention because although Midkiff et al teaches that the fabric may be part of a laminate, Midkiff does not teach that the second layer should comprise monolobal filaments. Braun et al teaches a fabric comprising bilobal filaments which is bonded to a second fabric. The second fabric may comprise either a circular filament or a multilobal filament having more than two lobes. See col. 8, lines 49-62. Braun teaches that having the difference in lobes in the two layers results in improved fluid transport. See col. 2, lines 12-41. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have bonded the fabric of Midkiff to a second layer comprising circular filaments as taught by Braun. One of ordinary skill in the art would have been motivated to bond the fabric of Midkiff to a

second layer in order to enhance the moisture transport abilities of the Midkiff fabric, which would be particularly desirable in a towel.

6. Claims 32-33, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff in view Lin, U.S. Patent No. 5,280,664. Midkiff does not teach putting the nonwoven fabric onto a handle. Lin teaches that nonwoven fabrics may be affixed to handles, used and then removed and disposed of. Therefore, it would have been obvious to one of ordinary skill in the art to have affixed the nonwoven fabric to a handle in order to form a cleaning implement with a replaceable wiper. One of ordinary skill in the art would have been motivated to affix the nonwoven to a handle in order to form a cleaning implement because the use of a handle enables the nonwoven wipe to be used to clean surfaces such as floors, wall, ceilings, etc., which it would be uncomfortable or inconvenient to clean using a wiping cloth alone. It further would have been obvious to have included several cloths so that the cloths could be cleaned and to have used the cloths wet and dry because the use of cleaning cloths both wet and dry is conventional for cleaning, (i.e. dusting would be done dry while other types of cleaning and scouring are generally done with a wet towel or wipe).

7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Midkiff in view of Braun and Lin. Neither Braun nor Midkiff teaches putting the nonwoven on a handle. Lin teaches that nonwoven fabrics may be affixed to handles, used and then removed and disposed of. Therefore, it would have been obvious to one of ordinary skill in the art to have affixed the nonwoven fabric to a handle in order to form a cleaning implement with a replaceable wiper. One of ordinary skill in the art would have been motivated to affix the nonwoven to a handle in order to form a cleaning implement because the use of a handle enables the nonwoven

wipe to be used to clean surfaces such as floors, wall, ceilings, etc., which it would be uncomfortable or inconvenient to clean using a wiping cloth alone.

Applicant's arguments filed 9/15/03 have been fully considered but they are not persuasive. Applicant argues that Midkiff does not teach that the disclosed nonwoven fabric can be used as a cleaning sheet having dust, dirt and debris pick-up and retention and that therefore, Midkiff fails to anticipate the claim. However, Midkiff discloses that the fabric may be a towel. Towels are defined as absorbent papers or cloths which are used for wiping. Therefore, Midkiff discloses a cleaning sheet. With regard to Applicant's argument that no motivation is provided by the examiner to provide additional fibers such as pulp fibers or monolobal fibers in order to vary the properties, i.e., pulp fibers would impart additional absorbency, monolobal fibers would increase strength, etc.

With regard to the combination of Braun and Midkiff, Applicant argues that Braun does not teach multicomponent fibers. However, Midkiff does teach multicomponent fibers. Braun is relied for the teaching of having fibers having different cross-sections in different layers to improve absorbency.

With regard to the examples in the specification, the examples do not compare the invention to the prior art set forth in the rejection. Further, it is noted that the examples are not commensurate in scope with the claims.

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for all official faxes is (703) 872-9306. The fax number for unofficial faxes is (703) 305-5436.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c